

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of Application of	)	
	)	
NORTHWEST UTILITIES SERVICE	)	FCC File No. 0006552257
COMPANY	)	
	)	
To Modify License for Automated Maritime	)	
Telecommunications System Station WQJ718	)	

**ORDER**

**Adopted: June 19, 2015**

**Released: June 22, 2015**

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

1. *Introduction.* We have before us a petition filed by Mission Broadcasting Inc. (Mission) to deny the above-captioned application filed by Northwest Utilities Service Company (NUSCO) to modify its license for Automated Maritime Telecommunications System (AMTS) Station WQJ718 by adding a new location at Mt. Sunapee, New Hampshire.<sup>1</sup> For the reasons set forth below, we grant the petition and will dismiss the application.

2. *Background.* AMTS<sup>2</sup> stations are authorized on the condition that no harmful interference will be caused to reception of existing television stations.<sup>3</sup> In establishing rules for AMTS, the Commission considered the potential for interference to television reception, particularly with respect to television Channels 10 and 13, because of the proximity of AMTS frequencies to those channels.<sup>4</sup> An applicant proposing to locate an AMTS station within 169 kilometers (105 miles) of a Channel 13 television station, or within 129 kilometers (80 miles) of a Channel 10 television station, must submit an engineering study demonstrating the means it will use to avoid interference to television reception within the television station's Grade B contour.<sup>5</sup> If there are at least one hundred residences within both the proposed AMTS station's predicted interference contour and the television station's Grade B contour, the AMTS applicant must (1) show that its proposed site is the only suitable location, (2) develop a plan to

<sup>1</sup> Petition to Deny (filed Dec. 24, 2014) (Mission Petition). NUSCO filed an opposition. Opposition to Petition to Deny (filed Jan. 7, 2015) (NUSCO Opposition). Mission filed a reply. Reply to Opposition to Petition to Deny (filed Jan. 20, 2015) (Mission Reply). NUSCO filed a response to Mission's reply. Letter from Greg Kunkle, Counsel for NUSCO, to Marlene H. Dortch, Secretary, Federal Communications Commission (Feb. 20, 2015) (NUSCO Response).

<sup>2</sup> The AMTS service was established to meet the communications needs of vessels on inland waterways, *see* Amendment of Parts 2, 81 and 83 of the Commission's Rules to Allocate Spectrum for an Automated Inland Waterways Communications System (IWCS) along the Mississippi River and Connecting Waterways, *Report and Order*, GEN Docket No. 80-1, 84 FCC 2d 875 (1981) (*IWCS Report and Order*), but the Commission's rules now permit AMTS stations to provide service to units on land, including private land mobile radio service, *see* MariTEL, Inc. and Mobex Network Services, LLC, *Report and Order*, WT Docket No. 04-257, 22 FCC Rcd 8971, 8974-78 ¶¶ 4-10 (2007), *on recon.*, *Memorandum Opinion and Order*, 25 FCC Rcd 533 (2010), *Order on Reconsideration*, 26 FCC Rcd 2491 (2011), *application for review dismissed*, *Second Memorandum Opinion and Order*, 26 FCC Rcd 16579 (2011).

<sup>3</sup> 47 C.F.R. § 80.215(h).

<sup>4</sup> *See IWCS Report and Order*, 84 FCC 2d at 897 ¶ 80.

<sup>5</sup> *See* 47 C.F.R. §§ 80.215(h)(2), 80.475(a)(1).

control any interference its operations cause within the Grade B contour, and (3) agree to make any necessary adjustments to affected television receivers to eliminate such interference.<sup>6</sup>

3. In 2002, the Commission adopted a geographic area licensing approach for AMTS stations.<sup>7</sup> While geographic licensees generally are authorized to place stations anywhere within their service areas, the Commission requires individual licensing of stations at locations for which the rules mandate submission of an engineering study demonstrating that interference to television reception will be avoided.<sup>8</sup>

4. NUSCO, an electric utility company, acquired the geographic license for AMTS Station WQEI718 by assignment in 2006.<sup>9</sup> In the captioned modification application, NUSCO seeks to add a transmitter location for which individual licensing is required because of its proximity to television stations. Mission, licensee of Channel 13 digital television (DTV) Station WVNY, Burlington, Vermont, filed a petition to deny asserting that the proposed operation would cause significant interference to television reception.<sup>10</sup> Mission asserts that there are over 30,000 residences within both the proposed AMTS station's predicted interference contour and the television station's noise limited service contour (NLSC),<sup>11</sup> and the proposed AMTS station is predicted to cause interference to almost 2300 residences.<sup>12</sup> NUSCO initially concluded that the proposed AMTS station's predicted interference contour does not overlap Station WVNY's NLSC,<sup>13</sup> but ultimately asserted that there are approximately 4200 residences within both the proposed AMTS station's predicted interference contour and the television station's NLSC, but the proposed AMTS station is not predicted to cause interference to any of them.<sup>14</sup>

5. *Discussion.* We dismiss the application as defective. Because there are more than one

<sup>6</sup> See 47 C.F.R. § 80.215(h)(3). Any AMTS licensee that, despite these precautions, causes interference to television reception within the Grade B contour must cure the problem within ninety days of the time it is notified in writing by the Commission or discontinue operation of the station. 47 C.F.R. § 80.215(h)(4). The AMTS licensee also is expected to help resolve complaints of interference outside the Grade B contour. *Id.*

<sup>7</sup> See Amendment of the Commission's Rules Concerning Maritime Communications, *Second Memorandum Opinion and Order and Fifth Report and Order*, PR Docket No. 92-257, 17 FCC Rcd 6685, 6696 ¶ 24 (2002), *erratum*, 19 FCC Rcd 9918 (2004).

<sup>8</sup> See 47 C.F.R. § 80.385(b).

<sup>9</sup> See FCC File No. 0002147762.

<sup>10</sup> See Mission Petition at 1-2.

<sup>11</sup> The AMTS rules refer to a television station's Grade B contour, which was used to define the service area of an analog television station. With the conversion to DTV, the Commission developed the NLSC to approximate the same probability of service as the analog Grade B contour. See, e.g., Review of the Commission's Part 95 Personal Radio Services Rules, *Notice of Proposed Rule Making and Memorandum Opinion and Order on Reconsideration*, WT Docket No. 10-119, 25 FCC Rcd 7651, 7676 ¶ 65 (2010); Study of Digital Television Field Strength Standards and Testing Procedures, Report To Congress: The Satellite Home Viewer Extension and Reauthorization Act of 2004, ET Docket No. 05-182, 20 FCC Rcd 19504, 19507 ¶ 3 (2005). The NLSC is defined using the F(50,90) field strength contour, the area in which at least fifty percent of the locations can be expected to receive a signal that exceeds a specified field strength value at least ninety percent of the time. See Establishment of a Model for Predicting Digital Broadcast Television Field Strength Received at Individual Locations, *Notice of Proposed Rule Making and Further Notice of Proposed Rule Making*, ET Docket No. 10-152, 25 FCC Rcd 10474, 10485 ¶ 25 (2010).

<sup>12</sup> See Mission Reply at 2-3 and Appendices A, B.

<sup>13</sup> See Analysis of Interference Potential Mt. Sunapee at 7 (filed with FCC File No. 0006552257).

<sup>14</sup> See NUSCO Response at 1-2 and Enclosure "Analysis of Potential Co-Channel or TV Interference for the Proposed AMTS Station at Mt. Sunapee For Northeast Utilities, February 12, 2012, Revision 2."

hundred households within both the proposed AMTS station's predicted interference contour and the television station's NLSC, NUSCO must, as noted above, (1) show that its proposed site is the only suitable location, (2) develop a plan to control any interference its operations cause within the Grade B contour, and (3) agree to make any necessary adjustments to affected television receivers to eliminate such interference.<sup>15</sup> We agree with Mission that NUSCO has not satisfied the first requirement.<sup>16</sup> NUSCO argues, correctly, that a petitioner asserting that an AMTS applicant's proposed station location is not the only suitable location must identify an alternative location for the proposed station, whereupon the burden shifts to the applicant to demonstrate that the suggested alternative is not suitable,<sup>17</sup> and that Mission has not identified any alternatives.<sup>18</sup> Before a petitioner must identify alternatives, however, the applicant must provide "a showing that the proposed site is especially well-suited to provide the proposed service."<sup>19</sup> NUSCO has not done so. NUSCO's complete explanation for its choice of Mt. Sunapee is that "NUSCO chose its proposed site location to provide the desired level of radio frequency coverage while attempting to minimize the impact to the surrounding population. The AMTS site selection criteria was [sic] based upon factors such as composite site coverage, co-channel and adjacent-channel intra-system interference, and channel reuse."<sup>20</sup> This generic description, which would seem to apply to any site in any radio system, does not allow others to assess the proposed site's suitability.

6. Because there is a chance that NUSCO will seek authorization to operate at Mt. Sunapee at some point in the future, we address the discrepancies between the parties' interference analyses. We note that Mission posits a larger AMTS interference contour, which, as suggested by NUSCO,<sup>21</sup> may reflect that the Mission analysis did not have include the 9 dB correction factor set forth in the AMTS rules.<sup>22</sup> More significantly, Mission used a desired-to-undesired (D/U) signal ratio of -10 dB to predict which households in the overlap area would incur interference, while NUSCO used a D/U ratio of -33 dB. When the Commission adopted the AMTS rules, it did not prescribe a methodology for the required engineering study showing the means of avoiding interference to television reception.<sup>23</sup> Applicants may use any methodology that "is adequate to show that interference to television reception will be avoided."<sup>24</sup> Division precedent, however, supports the use of a -33 dB D/U ratio.<sup>25</sup> The Division explained that, even though the standard D/U ratio for upper-adjacent channel analog National Television Systems Committee (NTSC) television station interference into DTV is -48 dB, a more conservative D/U ratio of -33 dB is more appropriate, as "[t]he effective occupied bandwidth of the [AMTS] operations . . . appears to be

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<sup>15</sup> See 47 C.F.R. § 80.215(h)(3).

<sup>16</sup> See Mission Reply at 4. We need not at this time address whether NUSCO satisfied the other requirements.

<sup>17</sup> See Amendment of the Commission's Rules Concerning Maritime Communications, *Second Memorandum Opinion and Order and Fifth Report and Order*, PR Docket No. 92-257, 17 FCC Rcd 6685, 6703 ¶ 38 (2002).

<sup>18</sup> See NUSCO Opposition at 4.

<sup>19</sup> 47 C.F.R. § 80.215(h)(3)(i).

<sup>20</sup> See NUSCO Opposition at 4-5.

<sup>21</sup> See NUSCO Opposition at 2.

<sup>22</sup> See, e.g., 47 C.F.R. §§ 80.385(b)(1), 80.479(b).

<sup>23</sup> See Amendment of the Commission's Rules Concerning Maritime Communications, *Fourth Report and Order and Third Further Notice of Proposed Rule Making*, PR Docket No. 92-257, 15 FCC Rcd 22585, 22608-09 ¶¶ 45-48 (2000) (citing *IWCS Report and Order*, 84 FCC 2d at 900 ¶ 93).

<sup>24</sup> See *id.* at 22609 ¶ 48.

<sup>25</sup> See *Avista Corporation*, *Order*, 27 FCC Rcd 263, 266 ¶ 6 (WTB MD 2012), *aff'd on reconsideration*, 28 FCC Rcd 5258 (WTB MD 2013), *review pending*.

greater than that of a conventional NTSC visual carrier.”<sup>26</sup> Mission, on the other hand, offered no explanation for its choice of -10 dB. On the record before us, it appears that the NUSCO engineering study more accurately reflects the proposed AMTS station’s potential to cause interference to television reception.

7. *Conclusion.* For reasons set forth above, we grant Mission’s petition to deny the subject application to modify NUSCO’s license for AMTS Station WQJ718 by adding a new location at Mt. Sunapee.

8. Accordingly, IT IS ORDERED, pursuant to Sections 4(i), 303(r), and 309(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), 309(d), and Section 1.934 of the Commission’s Rules, 47 C.F.R. § 1.934, that the petition to deny filed by Mission Broadcasting Inc. on December 24, 2014, IS GRANTED, and FCC File No. 0006552257 SHALL BE DISMISSED.

9. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission’s Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone  
Deputy Chief, Mobility Division  
Wireless Telecommunications Bureau

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<sup>26</sup> *Id.* at 266 ¶ 6 & n.22 (citing LoJack Corporation, *Declaratory Ruling and Order*, WT Docket No. 06-142, 26 FCC Rcd 12991, 12999 ¶ 18 (PSHSB 2011) (noting that the D/U threshold ratio for lower-adjacent DTV signals into a DTV receiver has been measured to be about -33 dB)).